

What is Claimed:

- 1 1. A mobile phone set comprising:
 - 2 a personal locator beacon transmitter circuit; and
 - 3 a microprocessor coupled to the circuit and configured to activate the
 - 4 circuit only when there is no mobile phone service available and the mobile phone user
 - 5 requests emergency service.
- 1 2. A phone set according to claim 1 further comprising a global
- 2 positioning system receiver circuit coupled to the microprocessor, the microprocessor
- 3 further configured to include location coordinates from the global positioning system
- 4 receiver circuit with a beacon transmitted by the personal locator circuit.
- 1 3. A phone set according to claim 1 wherein the personal locator beacon
- 2 circuit transmits a beacon at a frequency of approximately 406 MHz.
- 1 4. A phone set according to claim 3 wherein the personal locator beacon
- 2 circuit also transmits a homing signal at a frequency selected from approximately 121.5
- 3 MHz and 243 MHz.
- 1 5. A phone set according to claim 4 further comprising a microphone
- 2 coupled to the personal locator beacon transmitter circuit such that the homing signal
- 3 includes voice transmission.
- 1 6. A phone set according to claim 1 wherein the personal locator beacon
- 2 circuit transmits a beacon that includes an identification code.
- 1 7. A phone set according to claim 6 wherein the identification code is
- 2 selected from a serial number and a phone number of the handset.
- 1 8. A phone set according to claim 1 further comprising a short range
- 2 transceiver coupled to the personal locator beacon transmitter circuit and the
- 3 microprocessor such that the locator beacon circuit transmits a beacon that includes
- 4 emergency information received from the short range transceiver.
- 1 9. A method of requesting emergency service on a mobile phone handset
- 2 comprising the steps of:
 - 3 determining if mobile service is available; and

4 activating a personal locator beacon transmitter circuit in the event that
5 such service is unavailable.

1 10. The method according to claim 9 wherein the transmitter circuit
2 transmits a beacon that includes global positioning system location coordinates.

1 11. The method according to claim 9 wherein the transmitter circuit
2 transmits a beacon that includes an identification code.

1 12. The method according to claim 11 wherein the identification code is
2 selected from a serial number and a phone number of the handset.

1 13. The method according to claim 9 wherein the transmitter circuit
2 transmits a beacon at a frequency of approximately 406 MHz.

1 14. The method according to claim 9 wherein the transmitter circuit
2 transmits a homing signal at a frequency selected from approximately 121.5 MHz and
3 243 MHz.

1 15. The method according to claim 14 wherein voice transmission is
2 included with the homing signal.

1 16. The method according to claim 9 wherein the beacon signal includes
2 emergency information received from a short range transceiver located in the handset.